DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027099
Date Inspected: 24-Jan-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: L & M Industrial Fabricators

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Tangent, Oregon

CWI Name:	Tom Dreyer			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☑ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☐ Yes	☑ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: Tower Head Parapet

Summary of Items Observed:

This Quality Assurance (QA) Inspector, Art Peterson arrived at L & M Industrial Fabricators between the times noted above to randomly observe Quality Control (QC) personnel monitor the welding operations performed by L & M personnel and the NDT inspection on the fabrication of chimney parapet walls to the Tower Head Top Plate. The following observations for the extra work being performed to the following contract change order were:

CCO: 196 - Description: Construct parapet walls at the Tower Heads

North Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder David Harrington (Welder ID #34) performing the fill and cover pass weld operation on a complete-joint-penetration (CJP) corner-joint groove weld per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3G) vertical position connecting the parapet wall base plate-(A6a) to parapet wall plate-(A6b) of the North Chimney Tower Head. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the fill pass weld operation that the minimum preheat temperature as per the approved WPS was established and afterwords verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-TC-U4b-GF using Hobart Excel Arc E71T-1 (.052") diameter electrode.

North Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder David Harrington (Welder ID #34) performing the fill and

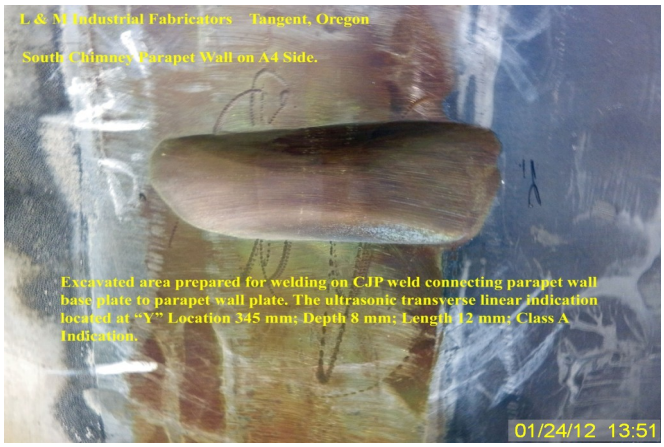
cover pass weld operation on a partial-joint-penetration (PJP) butt-joint groove weld per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3G) vertical position connecting the parapet wall base plate-(A6a) to the Tower Head top plate of the North Chimney Tower Head. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the fill pass weld operation that the minimum preheat temperature as per the approved WPS was established and afterwords verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-TC-P4-GF using Hobart Excel Arc E71T-1 (.052") diameter electrode.

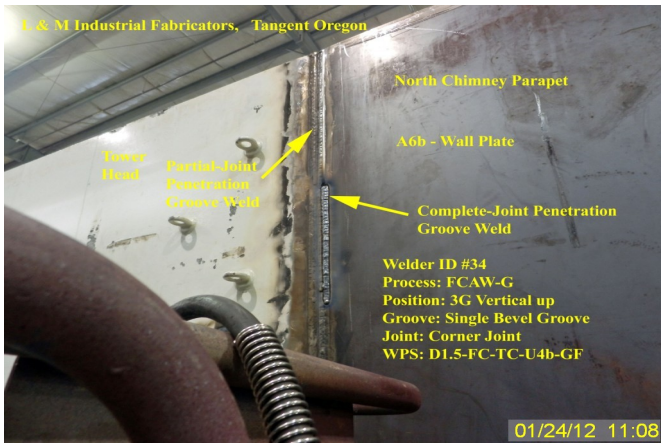
South Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder Otis Smith (Welder ID #19) performing the repair weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (2G) horizontal position on the CJP weld connecting the parapet wall base plate-(A4a) to the parapet wall plate-(A4b) of the South Tower Chimney Head. The QC NDT Inspector ultrasonically tested the CJP weld and observed one (1) rejectable transverse linear Class A indication at "Y" Location (345) mm. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the repair weld operation that the minimum preheat temperature as per the approved repair WPS was established and afterwords verified that the welding parameters (Amps and Volts) were in accordance with WPS-LM-FC-01 Repair using Hobart Excel Arc E71T-1 (.052") diameter electrode.

South Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder Otis Smith (Welder ID #19) performing the repair weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (2G) horizontal position on the CJP weld connecting the parapet wall base plate-(A6a) to the parapet wall plate-(A6b) of the South Tower Chimney Head. The QC NDT Inspector ultrasonically tested the CJP weld and observed one (1) rejectable transverse linear Class A indication at "Y" Location (843) mm.
This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the repair weld operation that the minimum preheat temperature as per the approved repair WPS was established and afterwords verified that the welding parameters (Amps and Volts) were in accordance with WPS-LM-FC-01 Repair using Hobart Excel Arc E71T-1 (.052") diameter electrode.





WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reportable on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer